



APR 19 2013

**510(k) SUMMARY**  
**Zimmer Spine Instinct™ Java® System**

**510(k) Number** \_\_\_\_K123552\_\_\_\_\_

**Date of Summary Preparation:** November 16, 2012

**Submitter:** Zimmer Spine, Inc.  
7375 Bush Lake Road  
Minneapolis, MN 55439

**Company Contact:** Elsa A. Linke  
Regulatory Affairs

**Manufacturer:** Zimmer Spine  
Cité Mondiale  
23, parvis des Chartrons  
33080 Bordeaux  
France

**Device Name:** *Instinct Java System*

**Common Name:** Spinal Fixation System

**Classification Name:** Pedicle Screw Spinal System

**Product Code:** MNI, MNH, NKB

**Regulation Number:** 888.3070

**Device Classification:** Class III

**Predicate Devices:** Zimmer Spine Instinct™ Java® System, K111301,  
K113270  
Zimmer Spine Sequoia Spinal System, K082032  
Medicrea PASS LP Spinal System, K100297  
Medtronic CD Horizon, K121764

**Description of Device:**

The *Instinct Java* System is a temporary implant system used to correct spinal deformity in skeletally mature patients and facilitate the biological process of spinal fusion. This system is intended for non-cervical posterior use in the thoracic, lumbar and sacral areas of the spine. The *Instinct Java* spinal fixation system is indicated to achieve bony fusion via osteosynthesis at thoracic, lumbar and/or lumbosacral levels of the spine in documented cases of degenerative disc disease (defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies), spondylolisthesis, fracture, spinal stenosis,

kyphotic or lordotic spinal deformities, scoliosis, tumor and pseudoarthrosis or for revision of a failed previous fusion.

The system consists of implants and instruments. The implants consist of monoaxial and polyaxial pedicle screws of varying diameters and lengths, blockers, pre-contoured and straight Titanium alloy rods, transverse connectors of varying lengths, hooks, autostable hooks and axial and side-by-side connectors. All implants are made of titanium alloy and one commercially pure titanium component within the transverse connectors.

Re-usable surgical instruments are provided to facilitate placement of the implants.

In addition, the *Instinct Java* System is compatible with the transverse connectors currently cleared for the market as part of the Sequoia Spinal System, identified in K082032. Furthermore, the *Instinct Java* titanium alloy rods may be connected to the NexLink Band & In-Line Rod Connector, identified in K062505, K060634, K052566, K052247, K031985. The system may also be used in combination with the Zimmer Spine Universal Clamp 5.5mm Ti implants. Axial and side-by-side connectors may be used with Nexlink 4.0 rods and Optima 6.0 rods.

The implants and instruments are provided non-sterile. Instructions for Use are provided that contain validated cleaning and sterilization instructions for the user.

This system is intended to provide stabilization until a solid spinal fusion develops. The system may then be removed, per the surgeon's discretion. This decision should be made based on the risk/benefit evaluation for each patient.

#### **Intended Use:**

The *Instinct Java* spinal fixation system is designed for spinal fixation procedures in skeletally mature patients performed through a posterior approach. The *Instinct Java* spinal fixation system is indicated for the temporary realignment and stabilization of one or more intervertebral segments from the thoracic spine to the sacrum until bony fusion is obtained.

The *Instinct Java* spinal fixation system is indicated to achieve bony fusion via osteosynthesis at thoracic, lumbar and/or lumbosacral levels of the spine in documented cases of degenerative disc disease (defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies), spondylolisthesis, fracture, spinal stenosis, kyphotic or lordotic spinal deformities, scoliosis, tumor and pseudoarthrosis, or for revision of a failed previous fusion.

#### **Comparison of Technological Characteristics:**

The purpose of this 510(k) is to seek clearance for the addition of hooks, autostable hooks, axial and side-by-side connectors, and associated instruments. The *Instinct Java* Spinal System shares the same technological characteristics as the predicate devices. These characteristics include similar design, materials, range of sizes, technical requirements, and intended use. Determination of substantially equivalent performance characteristics in regard to the predicate devices was confirmed through compliance with ASTM F1717-12 and ASTM F1798-97 (2008), including dynamic and static axial compression, static torsion, axial gripping capacity, and static tightening torque. In addition, this 510(k) establishes compatibility of the *Instinct Java* axial and side-by-side connectors in combination with Nex-Link 4.0mm CpTi rods and Optima 6.0 Ti alloy

rods. Furthermore, validated cleaning and sterilization instructions are provided for the non-sterile components of the system.

**Substantial Equivalence:**

The *Instinct Java* Spinal System is substantially equivalent to the predicate devices in design, materials, function and intended use.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center – WO66-G609  
Silver Spring, MD 20993-0002

Zimmer Spine, Incorporated  
% Mr. Ron Yarbrough  
Director of Regulatory Affairs  
7375 Bush Lake Road  
Minneapolis, Minnesota 55439

Letter dated: April 19, 2013

Re: K123552

Trade/Device Name: Instinct™ Java® System  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Pedicle screw spinal system  
Regulatory Class: Class III  
Product Code: NKB, MNI, MNH  
Dated: March 14, 2013  
Received: March 15, 2013

Dear Mr. Yarbrough:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA).

You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Mark N. Melkerson -S**

Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use Statement

510(k) Number (if known): \_K123552\_

Device Name: **Instinct™ Java® System**

### Indications for Use:

The *Instinct Java* spinal fixation system is designed for spinal fixation procedures in skeletally mature patients performed through a posterior approach.

The *Instinct Java* spinal fixation system is indicated for the temporary realignment and stabilization of one or more intervertebral segments from the thoracic spine to the sacrum until bony fusion is obtained.

The *Instinct Java* spinal fixation system is indicated to achieve bony fusion via osteosynthesis at thoracic, lumbar and/or lumbosacral levels of the spine in documented cases of degenerative disc disease (defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies), spondylolisthesis, fracture, spinal stenosis, kyphotic or lordotic spinal deformities, scoliosis, tumor and pseudoarthrosis, or for revision of a failed previous fusion.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

**Ronald P. Jean -S**

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(Division Sign-Off)

Division of Orthopedic Devices

510(k) Number: K123552